GTP FOR UNINHIBITED Type II TRANSFORMER Unused New Transformer OIL				
Sl. No.	**Property**	**Test Method**	**BESCOM Requirement**	**Supplier offer**
A Function			**Type II**	
i	Viscosity at 40°C	IS 1448 (Part 25)	15mm²/s, Max	
ii	Viscosity at 0°C[1]	IS 1448)Part 25)	1800mm²/s, Max	
iii)	Pour Point	IS 1448 (Part 10/ Sec 2)	_10°C, Max To be based on LCSET refer Table 1[1]	
iv)	Water content	IEC 60814	In Bulk - 30mg/kg Max	
			Drum 40mg/kg , Max	
v)	Breakdown Voltage	IS6792	As delivered 30kV, Min	
			After Treatment 70kN	
vi)	Density at 20° C	IS 1448 (Part 16)	0.895g/ml, Max	
vii)	DDF at 90°C(Dielectric Dissipation factor)	IS 16086	0.005, Max	
viii)	Particle content	IS 13236	No general requirement[10]	
B Refining/Stability				
ix)	Appearance	-	clear, free from sediment and suspended matter	
x)	Acidity	IEC 62021- 1	0.01 mg KOH/g, Max	
xi)	Interfacial tension	ASTM D971	No general requirement[6](min 40mN/m)	
xii)	Total sulphur content	ISO 14596 or ASTM D4294	No general requirement	
xiii)	Corrosive sulphur	DIN 51353	Not Corrosive	
xiv)	Potentially Corrosive sulphur	IS 16310	Not Corrosive	
xv)	DBDS	IS 16947 (part 1)	Not detacbale (< 5 mg/kg)	
xvi)	Inhibitors according to IS 13631/IEC 60666	IS 13631	(U) Uninhibited Oil : not detactable (<0.01%)	
			(T) Trace inhibited oil: <0.08%	
			(I) Inhibited oils: 0.08% - 0.40%	
			(see 3.6 to 3.8)	
xvii)	Metal passivator additives according to IS 13631/IEC 60666	IS 13631	Not detectable (< 5 mg/kg), or as agreed upon with the purchaser	
xviii)	2 Furfural and related compounds content	IS 15668	Not detectable (<0.05 mg/kg) for each individual compound)	
C Performance				
XX	Oxidation stability	IS 12422 (Method C) Test Duration [11] (U) Uninhibited oil : 164h	For oils with other antioxidant additives and metal passivator Additives (see 6.12)	
a)	Total acidity [9]	1.9.4 of IS 12422	1.2m KOH/g Max	
b)	Sludge [9]	1.9.1 of IS 12422	0.8% Max	
c)	DDF at 90°C[9]	1.9.6 of IS 12422	0.500, Max	
xxi)	Gassing tendency	IEC 60628, Method A	No general requirement	
xxii)	ECT	See 6.14	No general requirement	
D Health, Safety and Enviornment(HSE)				
xxiii)	Flash Point	IS 1448 (Part 21)	135° C, Min	
xxiv)	PCA content	IP 346	3% Max	
xxv)	PCB Content	IS 16082	Not detectable (<2 mg/kg)	